# The Theater Engineer Construction Battalion:

# General Engineering in Support of the Warfighter

By Lieutenant Colonel Adam S. Roth

he 844th Engineer Battalion, a United States Army Reserve unit headquartered in Knoxville, Tennessee, recently completed a mission as the theater construction battalion in Iraq. This article is germane to the Active Army and Reserve Component, since there were active duty United States Army, United States Air Force, and United States Army National Guard units within Task Force 844 during the deployment. It is hoped that some of the insights of this article will keep a few more Soldiers alive, safe, and trained, while giving the command teams of deploying battalions some peace of mind by learning from the experiences of the 844th.

# **Conditions**

he 844th Engineer Battalion received notification of sourcing for Operation Iraqi Freedom in the spring of 2008, and the first implications of modularity set in with the information that the battalion would not be deploying with its organic subordinate units. The first concern was to establish a commander's vision and conduct a mission analysis with the leadership of the "new" 844th Engineer Battalion, now becoming Task Force 844. The unit deployed to the National Training Center, Fort Irwin, California, in the summer of 2008 as part of Operation Sand Castle to conduct construction operations in a counterinsurgency environment. During that time, the commander's vision and mission statement crystallized. The key to this exercise was the cultivation of relationships and the inculcation of the commander's vision and intent into all subordinates a full year before actual deployment. The battalion developed deployment training guidance that specified all theater-specific leader and Soldier training tasks required for premobilization and set the training azimuth for the task force.

# Pre- and Postmobilization Training

he 844th Engineer Battalion and all subordinate units finally came together at the Fort McCoy, Wisconsin, mobilization station in early April 2009 and formally constituted as Task Force 844 after focusing on leader and Soldier tasks at various regional

training centers. The key to this event was to create a single identity for the newly formed unit. The second step was to conduct what was referred to as the "Patton briefing." The commander, command sergeant major, chaplain, and command chief warrant officer all conducted briefings on vision, intent, policies, and expectations. This practice would be carried far into the deployment, since the task force would continually be gaining and losing units.

The key to the success of the mobilization training plan was the partnership forged with the leaders of the 181st Infantry Brigade. It allowed the commander's vision to be fully exploited through collective training focused on construction support operations in a counterinsurgency environment. Task Force 844 was composed of both horizontal and vertical formations that required technical training for plumbers, carpenters, electricians, and horizontal military occupational specialties (MOSs). The 181st was able to conduct training with five separate mobile training teams through the United States Army Engineer School, Fort Leonard Wood, Missouri, yielding huge dividends. In collective training, the brigade's preparation of construction projects allowed the task force to construct more than 10 Southwest Asia huts, electrify a classroom, conduct numerous surveys of existing and future construction projects, and construct a combat road.

The other huge dividend that materially contributed to Task Force 844's postmobilization training was the presence of two subject matter experts from the 54th Engineer Battalion, the task force's relief-in-place/transfer-of-authority (RIP/TOA) partners, while conducting a mission readiness exercise. The benefits of their presence were immeasurable. The task force adopted this "pay-it-forward" methodology for every RIP/TOA in the future, sending company representatives on temporary duty back from theater for every incoming unit.

#### **Lines of Effort**

nce the task force hit the ground in Kuwait, leaders conducted all required theater training, taking full advantage of the mine-resistant, ambush-protected (MRAP) vehicle operator and maintainer courses,

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Report Documentation Page			Form Approved OMB No. 0704-0188	
Public reporting burden for the collection of information is estimated maintaining the data needed, and completing and reviewing the collectincluding suggestions for reducing this burden, to Washington Headqu VA 22202-4302. Respondents should be aware that notwithstanding a does not display a currently valid OMB control number.	tion of information. Send comments uarters Services, Directorate for Information	regarding this burden estimate mation Operations and Reports	or any other aspect of the 1215 Jefferson Davis	is collection of information, Highway, Suite 1204, Arlington
1. REPORT DATE	ГЕ		3. DATES COVERED	
2010	2. REPORT TYPE		00-00-2010	to 00-00-2010
4. TITLE AND SUBTITLE			5a. CONTRACT NUMBER	
The Theater Engineer Construction Batallion: General Engineering In			5b. GRANT NUMBER	
Support Of The Warfighter			5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)			5d. PROJECT NUMBER	
			5e. TASK NUMBER	
			5f. WORK UNIT	NUMBER
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)  844th Engineer Battalion, Knoxville, TN, 37920			8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)			10. SPONSOR/MONITOR'S ACRONYM(S)	
			11. SPONSOR/M NUMBER(S)	ONITOR'S REPORT
12. DISTRIBUTION/AVAILABILITY STATEMENT <b>Approved for public release; distribut</b>	ion unlimited			
13. SUPPLEMENTARY NOTES Engineer, Washington: May-Aug 2010	). Vol. 40, Iss. 2; pg.	24, 4 pgs		
14. ABSTRACT  The 844th Engineer Battalion, a Unite recently completed a mission as the the Active Army and Reserve Component Force, and United States Army Nation hoped that some of the insights of this giving the command teams of deploying the 844th.	eater construction b , since there were ac nal Guard units with article will keep a fe	attalion in Iraq. T tive duty United in Task Force 84 w more Soldiers	This article is States Army, 4 during the alive, safe, an	germane to the United States Air deployment. It is nd trained, while
15. SUBJECT TERMS				
16. SECURITY CLASSIFICATION OF:		17. LIMITATION OF	18. NUMBER	19a. NAME OF

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**28** 

a. REPORT

unclassified

b. ABSTRACT

unclassified

setting conditions for eventual movement into Baghdad. Once in Baghdad, Task Force 844 conducted a standard RIP/TOA with the 54th Engineer Battalion, but now the task force had an entirely different mission. It would serve as the theater construction battalion, operating along three lines of effort (LOEs):

- Security
- Partnership
- Civil Capacity

What made this mission different from its predecessors was that the task force worked directly for the 555th Engineer Brigade at the start of the deployment (and for the 194th Engineer Brigade after midtour), performing all of the above LOEs in general support to the corps and the multinational divisions. All other engineer battalions in the theater served in a direct support role in a finite operational environment. The challenge for Task Force 844 was to operate in 14 of 18 Iraqi provinces, often simultaneously, and to effectively command and control that effort.

#### **Security**

This included all general support construction required for the theater. On 30 June, shortly after RIP/TOA, U.S. forces were scheduled to exit from cities, villages, and locales, according to the Status-of-Forces Agreement signed in 2008. The direct impacts to the task force were that many of the joint security stations and contingency operating posts had to relocate to larger bases. Later in the deployment, infrastructure required to facilitate the responsible drawdown of forces became a separate LOE and entailed the creation of infrastructure to move the forces and equipment out of Iraq.

The second portion of this LOE was assured mobility in the form of bridging. The 401st and 250th Engineer Companies (Multirole Bridge) were responsible for both routine inspections and maintenance of all the military bridges in southern Iraq.

#### **Partnership**

This included partnering with two separate Iraqi Army engineer units—the 8th Field Engineer Regiment in Diwaniyah and the Headquarters Field Engineer Regiment at Taji. Military transition teams were established at both locations, conducting training in many disciplines, including construction project management, combat lifesaver, staff-to-staff interaction and mentoring, maintenance, and bridging. Lifelong friendships were forged in this process.



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#### **Civil Capacity**

This included partnering with five provincial reconstruction teams in conjunction with the 172d Infantry Brigade—and later the 3d Brigade, 3d Infantry Division—conducting numerous site surveys and completing more than 30 projects in this endeavor. What made this an interesting mission was that the combat forces applied to this effort were all active duty Air Force, further displaying the task force's ability to work as a joint team. The task force was able to accomplish many missions, travel more than 954,000 miles, complete 226 projects, and earn a meritorious unit commendation because of its best business practices.

# **Best Business Practices**

ask Force 844 leaders established certain principles as guideposts to gauge the success of their mission. These best business practices included—

#### **Battle Rhythm**

The staff must work for the commander and not vice versa. The battle rhythm for the seven subordinate units had to mesh so that commanders could have their Soldiers in locations as far away as Basrah and Camp Korean Village and still be able to interact. Web-based tracking and communication software ensured connectivity and responsiveness across the entire Iraq joint operating area.

### **Work Ethic**

The maxim that "engineers are not kept in reserve" rang true for Task Force 844. The theater engineer brigade assigned numerous projects to the task force, but many projects were developed in conjunction with the operational environment owner and only later gained brigade approval. But this was not the only key to success. Company commanders tailored their force packages based on skill sets, not as platoons; thus, a platoon could be doing as many as five projects simultaneously. This was the key to the success of the task force: small-unit leaders trusting noncommissioned officers (NCOs) and junior enlisted Soldiers to lead projects and thrive.

#### **Platoon Warrant Officers**

A singular success of the construction effort was the role played by three platoon warrant officers, all utilities operation and maintenance technicians (MOS 210A). They served as mentors and leaders throughout the entire construction process. Each one had unique talents that had

major impacts on the success of the task force while also developing the next generation of technical leaders.

#### Metrics

Everything that a unit does can be quantified, whether it is the number of miles driven, feet of conduit installed, or number of Army physical fitness tests passed. Each metric was a gauge of success and, properly documented, made development of counseling sessions, awards, and after action reviews a simple process. When metrics are determined and constantly compiled, end-of-deployment awards and evaluations take care of themselves.

# **Transportation Assets**

One of the practices the task force inherited from its predecessors was taking the majority of M916A1/M870A1 tractor-trailer combinations out of the horizontal companies and moving them to the forward support company (FSC). Otherwise, once a piece of equipment and an operator were delivered by the tractor-trailer to a job site, the combination would sit unused until the end of the project. With the FSC controlling that asset based on task force movement needs, those vehicles stayed in motion and ensured that the lifeblood of logistics flowed for the task force across the entire Iraq joint operating area.

### **Horizontal Company Maintenance Technicians**

Despite having an enormous amount of rolling stock, there is no maintenance warrant officer in the modified table of organization and equipment (MTOE) for the horizontal company. When a unit maintenance technician (MOS 915A) was detached from the FSC to the 961st Engineer Company (Horizontal), the warrant officer magic began. At the time of RIP/TOA, the unit was far below an acceptable operational readiness rate. Within a mere 60 days, through the expertise of this warrant officer, the unit attained a readiness rate higher than 90 percent. This should be seriously considered as a change and documented in the future.

# Junior Leader Development

As an Army Reserve unit, the amount of time available in a nondeployed status is far less than required to develop junior leaders. Unit leaders took advantage of the time while deployed to conduct regular officer and NCO development classes. Since many junior NCOs serving in squad-level leadership positions were lacking the tools to properly do their jobs, the task force command sergeant major crafted a two-day NCO development workshop,

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using small-group instruction on counseling, evaluations, supervision, and leadership. In the process, the workshop developed more than 200 junior NCOs and made the task force stronger in the process.

#### Recognition

Acknowledgement of a job well done was a hallmark of our deployment experience. The leaders of Task Force 844 ensured that deserving Soldiers were recognized. During the deployment, the task force garnered the Itschner Award, the Sturgis Medal, the Van Autreve Award, and the Steel deFleury Medal. The task force also administered an active Bronze deFleury Medal program. Even more noteworthy is that one logistician received the United States Army Quartermaster Corps Order of St. Martin, and two maintainers received the United States Army Ordnance Corps Order of Samuel Sharpe. The task force additionally had an element that competed for the Army Award for Maintenance Excellence at the Department of the Army level.

#### **Information Operations**

The message is just as important as the mission. Task Force 844 executed an aggressive information operations campaign throughout the entire deployment process. Elements of the task force were on Armed Forces Network and the Pentagon Channel frequently and conducted a weekly radio talk show highlighting the Soldiers of Task Force 844 and their service on our Knoxville-based radio station, WIVK-FM. The public affairs officer, a sergeant, excelled at her job.

# **Summary**

he author hopes that some of the information in this article gives pause to future command teams as they prepare to deploy as part of the best-trained, best-equipped, and best-led Army that our nation can provide.



Lieutenant Colonel Roth was the commander of the 844th Engineer Battalion at the time this article was submitted. He is now attending the Army War College at Carlisle Barracks, Pennsylvania. He has served in numerous staff assignments, including a tour as the executive officer of the 458th Engineer Battalion, and has commanded a combat heavy engineer company. He is a graduate of the Command and General Staff College and holds a master's in mechanical engineering from Boston University.

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